

ABSTRACT

THESIS: The Effects of COCOZEN Supplementation On Arterial Elasticity in Middle-Aged and Older Adults

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PURPOSE: To determine the effects of COCOZEN supplementation on arterial elasticity in middle-aged and older adults. **METHODS:** This was a double-blind placebo controlled trial. Participants were administered either COCOZEN (1.5g/day) or placebo and underwent assessments of vascular hemodynamics and ultrasonography of the carotid artery three separate times over eight weeks. **RESULTS:** No changes were observed for carotid compliance, distensibility, and β -stiffness index. However, the absolute and relative changes for carotid compliance and distensibility increased with concomitant reductions in carotid β -stiffness index (all, $p < 0.05$). Carotid systolic blood pressure decreased ($p < 0.05$), while no changes were observed for carotid diastolic blood pressure or carotid pulse pressure ($p > 0.05$). **CONCLUSION:** The COCOZEN-related improvements in both carotid systolic blood pressure and compliance may be important for the treatment of chronic vascular disease. Overall, COCOZEN may be effective for the treatment of age-related vascular dysfunction to lower CVD risk.